pestka

```
=> s (IL-2 or interleukin-2)
L9        89538 (IL-2 OR INTERLEUKIN-2)
=> s l9 (p) (mutein# or mutant# or mutation#)
L10        2884 L9 (P) (MUTEIN# OR MUTANT# OR MUTATION#)
=> s l10 (p) (isolat? or purif?)
L11         387 L10 (P) (ISOLAT? OR PURIF?)
=> s l11 (p) (leukocyte3 or leucocyte#)
L12           0 L11 (P) (LEUKOCYTE3 OR LEUCOCYTE#)
=> s l11 (p) (leukocyte# or leucocyte#)
L13           9 L11 (P) (LEUKOCYTE# OR LEUCOCYTE#)
=> d l13 1-9 bib ab

L13  ANSWER 1 OF 9     MEDLINE
AN   1999384110     MEDLINE
DN   99384110   PubMed ID: 10453030
TI   Acceleration and increased severity of collagen-induced arthritis in
     P-selectin mutant mice.
AU   Bullard D C; Mobley J M; Justen J M; Sly L M; Chosay J G; Dunn C J;
     Lindsey J R; Beaudet A L; Staite N D
CS   Department of Comparative Medicine, University of Alabama, Birmingham
     35294, USA.. pike@uab.edu
NC   AI32177 (NIAID)
     GM15483 (NIGMS)
SO   JOURNAL OF IMMUNOLOGY, (1999 Sep 1) 163 (5) 2844-9.
     Journal code: 2985117R. ISSN: 0022-1767.
CY   United States
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   Abridged Index Medicus Journals; Priority Journals
EM   199909
ED   Entered STN: 19990925
     Last Updated on STN: 19990925
     Entered Medline: 19990914
AB   P-selectin plays an important role in leukocyte adherence to
     microvascular endothelium and is expressed in synovial tissue from
     patients with rheumatoid arthritis (RA). However, the contribution of
     P-selectin to the initiation and chronicity of joint inflammation is not
     well understood. In these studies, collagen-induced arthritis (CIA) was
     induced in P-selectin mutant (-/-) mice to explore the role of
     P-selectin in the development of joint inflammation. Surprisingly, CIA
     onset was accelerated and severity was increased in P-selectin
     mutant mice, compared with wild-type mice (+/+). Increased levels
     of anti-type II collagen IgG were detected in both nonarthritic and
     arthritic P-selectin mutant mice from days 14-91. In addition,
     splenocytes isolated from immunized and nonimmunized P-selectin
     mutant mice produced significantly less IL-2
     and IL-4, but significantly higher levels of IL-10 and IL-5 than
     splenocytes from wild-type mice. These observations show that
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P-selectin-mediated **leukocyte** rolling is not required for the development of murine CIA and that P-selectin expression exerts a controlling effect on the development of Ag-driven inflammatory joint disease, possibly by mediating the recruitment and/or trafficking of specific **leukocyte** subtypes into lymphoid tissue or inflammatory foci.

L13 ANSWER 2 OF 9 MEDLINE
AN 91250739 MEDLINE
DN 91250739 PubMed ID: 1710251
TI Molecular and functional analysis of human natural killer cell-associated neural cell adhesion molecule (N-CAM/CD56).
AU Lanier L L; Chang C; Azuma M; Ruitenberg J J; Hemperly J J; Phillips J H
CS Becton Dickinson Immunocytometry Systems, San Jose, CA 95131.
SO JOURNAL OF IMMUNOLOGY, (1991 Jun 15) 146 (12) 4421-6.
Journal code: 2985117R. ISSN: 0022-1767.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199107
ED Entered STN: 19910728
Last Updated on STN: 19960129
Entered Medline: 19910710
AB The neural cell adhesion molecule (N-CAM/CD56) is a member of the Ig supergene family that has been shown to mediate homophilic binding. Several isoforms of N-CAM have been identified that are expressed preferentially in different tissues and stages of embryonic development. To examine the primary structure of N-CAM expressed in **leukocytes**, N-CAM cDNA were generated by polymerase chain reaction from RNA **isolated** from normal human NK cells and the KG1a hematopoietic leukemia cell line. The sequence of **leukocyte**-derived N-CAM cDNA was essentially identical with N-CAM cDNA from human neuroblastoma cells that encode the 140-kDa isoform of N-CAM. Inasmuch as N-CAM is preferentially expressed on human NK cells and a subset of T lymphocytes that mediate MHC-unrestricted cell-mediated cytotoxicity, we examined the potential role of N-CAM in cell-mediated cytotoxicity and heterotypic lymphocyte-tumor cell adhesion. N-CAM loss **mutants** were established from the human N-CAM+ KG1a leukemia cell line, and N-CAM cDNA was transfected into a human colon carcinoma cell line and murine L cells.
Using this panel of **mutants** and transfectants, it was determined that expression of N-CAM on these target cells does not affect susceptibility to resting or **IL-2**-activated NK cell-mediated cytotoxicity. Moreover, expression of N-CAM in these transfectants failed to induce homotypic or heterotypic cellular adhesion.
Collectively, these studies indicate that homophilic N-CAM interactions probably do not mediate a major role in the cytolytic interaction between NK cells and N-CAM+ tumor cell targets.

L13 ANSWER 3 OF 9 MEDLINE
AN 86006821 MEDLINE
DN 86006821 PubMed ID: 3930388
TI The generation of stable human T-cell hybridomas which constitutively produce interleukin-2 and chemotactic factor.
AU Foon K A; Rossio J L; Schroff R W; Wahl S M; Ruscetti F W; Abrams P G; Rager H C; Pickeral S F; Fidler I J
NC N01-CO-23909 (NCI)
N01-CO-23910 (NCI)
SO HYBRIDOMA, (1985 Fall) 4 (3) 211-22.
Journal code: 8202424. ISSN: 0272-457X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English

FS Priority Journals
EM 198511
ED Entered STN: 19[illegible]00321
Last Updated on STN: 19970203
Entered Medline: 19851115

AB We report the successful generation of human T-cell hybridomas that constitutively secrete lymphokines. An acute lymphoblastic leukemia T-cell line, CCRF-H-SB2, free of reverse transcriptase and mycoplasma, was sensitized to hypoxanthine, aminopterin, and thymidine (HAT) by selecting out a **mutant** deficient in hypoxanthine guanine phosphoribosyl transferase (HGPRT) in 8-azaguanine. Peripheral blood T lymphocytes from normal donors were incubated in vitro with 10 micrograms/ml of concanavalin A for 48 h and subsequently fused with the CCRF-H-SB2 HAT-sensitive cell line. Following 5 weeks in culture, 38 of 440 wells (8.6%) demonstrated hybridoma growth. Supernatants of these cultures were screened for **interleukin-2** (**IL-2**), chemotactic factor, interferon, migration inhibition factor, and macrophage-activating factor activities. Twelve (of 38) hybrids exhibited **IL-2** activity, and eight of these were successfully cloned. The highest secreting clone was demonstrated to have mRNA to **IL-2** while the parent CCRF-H-SB2 had no detectable mRNA to **IL-2**. Three hybrid cultures produced chemotactic factor; one was successfully cloned and grown in serum-free medium, where it continued to constitutively produce chemotactic factor as well as **IL-2** activity. The chemotactic factor was determined to have the same molecular weight (12,500 daltons) as **leukocyte** -derived chemotactic factor. Constitutive **IL-2** production remained stable for over 12 months. None of the hybridomas tested produced detectable levels of gamma interferon, migration inhibition factor, or macrophage activation factor. Because these T-cell hybridomas produce lymphokines constitutively and this phenotype is stable, they can be an important source of highly **purified** human lymphokines for clinical and laboratory investigations.

L13 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1999:566965 CAPLUS
DN 131:285282
TI Acceleration and increased severity of collagen-induced arthritis in P-selectin mutant mice
AU Bullard, Daniel C.; Mobley, James M.; Justen, James M.; Sly, Laurel M.; Chosay, Ohn G.; Dunn, Colin J.; Lindsey, J. Russell; Beaudet, Arthur L.; Staite, Nigel D.
CS Department of Comparative Medicine, University of Alabama, Birmingham, AL, 35294, USA
SO Journal of Immunology (1999), 163(5), 2844-2849
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB P-selectin plays an important role in **leukocyte** adherence to microvascular endothelium and is expressed in synovial tissue from patients with rheumatoid arthritis (RA). However, the contribution of P-selectin to the initiation and chronicity of joint inflammation is not well understood. In these studies, collagen-induced arthritis (CIA) was induced in P-selectin **mutant** (-I-) mice to explore the role of P-selectin in the development of joint inflammation. Surprisingly, CIA onset was accelerated and severity was increased in P-selectin **mutant** mice, compared with wild-type mice (+/+). Increased levels of anti-type II collagen IgG were detected in both nonarthritic and arthritic P-selectin **mutant** mice from days 14-91. In addn., splenocytes **isolated** from immunized and nonimmunized P-selectin **mutant** mice produced significantly less **IL-2** and IL-4, but significantly higher levels of IL-10 and IL-5 than

splenocytes from wild-type mice. These observations show that P-selectin-med[redacted]ed **leukocyte** rolling is not re[redacted]red for the development of murine CIA and that P-selectin expression exerts a controlling effect on the development of Ag-driven inflammatory joint disease, possibly by mediating the recruitment and/or trafficking of specific **leukocyte** subtypes into lymphoid tissue or inflammatory foci.

RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1991:533926 CAPLUS
DN 115:133926
TI Molecular and functional analysis of human natural killer cell-associated neural cell adhesion molecule (N-CAM/CD56)
AU Lanier, Lewis L.; Chang, Chiwen; Azuma, Miyuki; Ruitenberg, Joyce J.; Hemperly, John J.; Phillips, Joseph H.
CS Becton Dickinson Immunocytometry Syst., San Jose, CA, 95131, USA
SO J. Immunol. (1991), 146(12), 4421-6
CODEN: JOIMA3; ISSN: 0022-1767
DT Journal
LA English
AB The neural cell adhesion mol. (N-CAM/CD56) is a member of the Ig supergene family that has been shown to mediate homophilic binding. Several isoforms of N-CAM have been identified that are expressed preferentially in different tissues and stages of embryonic development. To examine the primary structure of N-CAM expressed in **leukocytes**, N-CAM cDNA were generated by polymerase chain reaction from RNA **isolated** from normal human NK cells and the KG1a hematopoietic leukemia cell line. The sequence of **leukocyte**-derived N-CAM cDNA was essentially identical with N-CAM cDNA from human neuroblastoma cells that encode the 140-kDa isoform of N-CAM. Inasmuch as N-CAM is preferentially expressed on human NK cells and a subset of T lymphocytes that mediate MHC-unrestricted cell-mediated cytotoxicity, the authors examd. the potential role of N-CAM in cell-mediated cytotoxicity and heterotypic lymphocyte-tumor cell adhesion. N-CAM loss **mutants** were established from the human N-CAM+ KG1a leukemia cell line, and N-CAM cDNA was transfected into a human colon carcinoma cell line and murine L cells. Using this panel of **mutants** and transfectants, it was detd. that expression of N-CAM on these target cells does not affect susceptibility to resting **IL-2**-activated NK cell-mediated cytotoxicity. Moreover, expression of N-CAM in these transfectants failed to induce homotypic or heterotypic cellular adhesion. Thus, homophilic N-CAM interactions probably do not mediate a major role in the cytolytic interaction between NK cells and N-CAM+ tumor cell targets.

L13 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1985:594710 CAPLUS
DN 103:194710
TI The generation of stable human T-cell hybridomas which constitutively produce interleukin-2 and chemotactic factor
AU Foon, Kenneth A.; Rossio, Jeffrey L.; Schroff, Robert W.; Wahl, Sharon M.; Ruscetti, Francis W.; Abrams, Paul G.; Rager, Helen C.; Pickeral, Susan F.; Fidler, Isaiah J.
CS Lab. Mol. Immunoregul., Natl. Cancer Inst., Frederick, MD, 21701, USA
SO Hybridoma (1985), 4(3), 211-22
CODEN: HYBRDY; ISSN: 0272-457X
DT Journal
LA English
AB Human T-cell hybridomas that constitutively secrete lymphokines were successfully generated. An acute lymphoblastic leukemia T-cell line,

CCRF-H-SB2, free of reverse transcriptase and mycoplasma, was sensitized to hypoxanthine, aminopterin, and thymidine (HAT) by selecting out a **mutant** deficient in hypoxanthine guanine phosphoribosyl transferase (HGPRT) in 8-azaguanine. Peripheral blood T lymphocytes from normal donors were incubated in vitro with 10 .mu.g/mL of Con A for 48 h and subsequently fused with the CCRF-H-SB2 HAT-sensitive cell line. Following 5 wk in culture, 38 of 440 wells (8.6%) demonstrated hybridoma growth. Supernatants of these cultures were screened for **interleukin-2** (**IL-2**), chemotactic factor, interferon, migration inhibition factor, and macrophage-activating factor activities. Twelve hybrids exhibited **IL-2** activity, and 8 of these were successfully cloned. The highest secreting clone was demonstrated to have mRNA to **IL-2** while the parent CCRF-H-SB2 had no detectable mRNA to **IL-2**. Three hybrid cultures produced chemotactic factor; 1 was successfully cloned and grown in serum-free medium, where it continued to constitutively produce chemotactic factor as well as **IL-2** activity. The chemotactic factor was detd. to have the same mol. wt. (12,500 daltons) as **leukocyte**-derived chemotactic factor. Constitutive **IL-2** prodn. remained stable for over 12 mo. None of the hybridomas tested produced detectable levels of .gamma.-interferon, migration inhibition factor, or macrophage activation factor. Because these T-cell hybridomas produce lymphokines constitutively and this phenotype is stable, they can be an important source of highly **purified** human lymphokines for clin. and lab. investigations.

L13 ANSWER 7 OF 9 USPATFULL
AN 2002:136554 USPATFULL
TI Process for producing a pharmaceutical composition containing a protein which induces interferon-.gamma. production by an immunocompetent cell
IN Akita, Kenji, Okayama, JAPAN
Nukada, Yoshiyuki, Okayama, JAPAN
Fujii, Mitsukiyo, Okayama, JAPAN
Tanimoto, Tadao, Okayama, JAPAN
Kurimoto, Masashi, Okayama, JAPAN
PA Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, JAPAN (non-U.S. corporation)
PI US 6403079 B1 20020611
AI US 2001-819902 20010329 (9)
RLI Division of Ser. No. US 1997-832198, filed on 8 Apr 1997, now patented, Pat. No. US 6242255 Division of Ser. No. US 1996-721018, filed on 26 Sep 1996, now abandoned
PRAI JP 1995-270725 19950926
JP 1996-67434 19960229
JP 1996-269105 19960920
JP 1996-10050403 19960920
DT Utility
FS GRANTED
EXNAM Primary Examiner: Stucker, Jeffrey; Assistant Examiner: Seharaseyon, Jegatheesan
LREP Browdy and Neimark
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1025
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A protein of human cell origin, which induces the IFN-.gamma. production by immunocompetent cells and has the amino acid sequence of SEQ ID NO:1 near at the N-terminus. It can be produced from human cells such as lymphoblasts, lymphocytes, monoblasts, monocytes, myeloblasts, myelocytes, granulocytes and macrophages, and used for preventing and/or

treating IFN-.gamma. susceptive diseases.

L13 ANSWER 8 OF 9 USPATFULL
AN 2001:145077 USPATFULL
TI Protein which induces interferon-gamma production by immunocompetent cell
IN Akita, Kenji, Okayama, Japan
Nukada, Yoshiyuki, Okayama, Japan
Fujii, Mitsukiyo, Okayama, Japan
Tanimoto, Tadao, Okayama, Japan
Kurimoto, Masashi, Okayama, Japan
PA KABUSHIKI KAISHA HAYASHIBARA SEIBUTSU KAGAKU KENKYUJO, Okayama-shi, Japan (non-U.S. corporation)
PI US 2001018212 A1 20010830
US 6441138 B2 20020827
AI US 2001-752510 A1 20010103 (9)
RLI Division of Ser. No. US 1997-832198, filed on 8 Apr 1997, GRANTED, Pat. No. US 6242255 Division of Ser. No. US 1996-721018, filed on 26 Sep 1996, ABANDONED
PRAI JP 1995-270725 19950926
JP 1996-67434 19960229
JP 1996-10050403 19960920
DT Utility
FS APPLICATION
LREP BROWDY AND NEIMARK, P.L.L.C., SUITE 300, 624 NINTH STREET, N.W., WASHINGTON, DC, 20001-5303
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 1070
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A protein of human cell origin, which induces the IFN-.gamma. production by immunocompetent cells and has the amino acid sequence of SEQ ID NO:1 near at the N-terminus. It can be produced from human cells such as lymphoblasts, lymphocytes, monoblasts, monocytes, myeloblasts, myelocytes, granulocytes and macrophages, and used for preventing and/or treating IFN-.gamma. susceptive diseases.

L13 ANSWER 9 OF 9 USPATFULL
AN 2001:82580 USPATFULL
TI Protein which induces interferon-gamma production by immunocompetent cell
IN Akita, Kenji, Okayama, Japan
Nukada, Yoshiyuki, Okayama, Japan
Fujii, Mitsukiyo, Okayama, Japan
Tanimoto, Tadao, Okayama, Japan
Kurimoto, Masashi, Okayama, Japan
PA Kabushiki Kaisha Hayashibara Seibutsu Kegaku Kenkyujo, Okayama, Japan (non-U.S. corporation)
PI US 6242255 B1 20010605
AI US 1997-832198 19970408 (8)
RLI Division of Ser. No. US 1996-721018, filed on 26 Sep 1996, now abandoned
PRAI JP 1995-270725 19950926
JP 1996-67434 19960229
JP 1996-269105 19960920
DT Utility
FS Granted
EXNAM Primary Examiner: Stucker, Jeffrey; Assistant Examiner: Seharaseyon, Jegatheesan
LREP Browdy & Neimark
CLMN Number of Claims: 5
ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1045
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A protein of human cell origin, which induces the IFN-.gamma. production by immunocompetent cells and has the amino acid sequence of SEQ ID NO:1 near or at the N-terminus. It can be produced from human cells such as lymphoblasts, lymphocytes, monoblasts, monocytes, myeloblasts, myelocytes, granulocytes and macrophages, and used for preventing and/or treating IFN-.gamma. susceptive diseases.

L1 89538 INTERLEUKIN-2 OR IL-2

=> s l1 (p) (modif? or varia? or derivat?)

L2 8985 L1 (P) (MODIF? OR VARIA? OR DERIVAT?)

=> s l2 (p) (disease?)

L3 1375 L2 (P) (DISEASE?)

=> s l3 (p) (isolat? or purificat?)

L4 122 L3 (P) (ISOLAT? OR PURIFICAT?)

=> s l4 (p) (leucocyte# or leukocyte#)

L5 4 L4 (P) (LEUCOCYTE# OR LEUKOCYTE#)

=> s l1 (p) (mutant? or mutation? or mutein?)

L6 2918 L1 (P) (MUTANT? OR MUTATION? OR MUTEIN?)

=> s l6 (p) (disease?)

L7 338 L6 (P) (DISEASE?)

=> s l6 (p) (leukocyte# or leucocyte#)

L8 66 L6 (P) (LEUKOCYTE# OR LEUCOCYTE#)

=> s (IL-2 or interleukin-2)

L9 89538 (IL-2 OR INTERLEUKIN-2)

=> s l9 (p) (mutein# or mutant# or mutation#)

L10 2884 L9 (P) (MUTEIN# OR MUTANT# OR MUTATION#)

=> s l10 (p) (isolat? or purif?)

L11 387 L10 (P) (ISOLAT? OR PURIF?)

=> s l11 (p) (leukocyte# or leucocyte#)

L13 9 L11 (P) (LEUKOCYTE# OR LEUCOCYTE#)